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ABSTRACT

A model for increasing awareness of sex-bias and sex stereotyping in vocational education was developed. The model consisted of a five-hour workshop which included these elements: (1) an introductory slide presentation which provided an overview of sex stereotyping; (2) five group activities (The Exchange, A Closer Look, Taking Stock, What a Difference a Word Makes, and Building Our Image); and three pre-postassessment instruments designed to determine the degree of awareness of sex bias and stereotyping (Sex Awareness Instrument, Current Behavior Practices Questionnaire, and Personal Commitment). In addition to the three instruments, the Bem Sex Role Inventory was used to obtain feminine, masculine, androgynous, and undifferentiated scores of the respondents. Following pilot testing, the model was tested on eighty-one female home economics educators and fourteen male vocational counselors. From the results, it was concluded that the sexism-awareness workshop was effective in bringing about a statistically significant increase in degree of awareness of sex bias and sex stereotyping in vocational education. The assessment instruments are included in the appendixes. (Also available is the workshop facilitator manual, CE 018 812.) (JH)

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ED164849

FINAL REPORT

Project Numbers 78230176 and 89230061

THE DEVELOPMENT AND PILOT TESTING OF A MODEL TO CREATE AWARENESS OF SEX BIAS AND SEX STEREOTYPING IN VOCATIONAL EDUCATION

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September 1978

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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A debt of gratitude is owed the 81 vocational homemaking teachers and the 14 vocational counselors who participated in the research aspect of the study. A special word of appreciation is extended to the six home economics teacher educators, Gwen Aldredge, Linda Nelson, Lana Mangold, Martha Muncrief, Sarah Sienty, and Patsy Spurrier, who conducted the small group sessions at the facilitators' workshop.

Special thanks is given to the following persons: Joe Burleson for the statistical analysis of the data; Jaylie Longbotham Beckenhauer for organizing the data and for her assistance on the final report; and Criss McCuller for typing the report and for her help in the many details associated with the project.

All who have participated in this project share the hope that this study, despite its limitations, will assist in creating awareness of sex bias and sex stereotyping.

Wilma P. Griffin
Project Director
September 1978

TABLE OF CONTENTS

Page

Chapter

I. Introduction 1

II. Procedure 10

III. Results of the Study 19

IV. Summary and Recommendations 41

References 47

Appendices

Information Sheet 49

Sexism Awareness Instrument (Pre-test and Post-test) 50

Current Behavior Practices Questionnaire 57

Personal Commitment 60

What Do You Think? (Workshop Evaluation) 61

LIST OF TABLES

TABLES		Page
1	Profile of Sample	19
2	Teaching Concentration of Homemaking Teachers and Percentages of Males in Classes	22
3	Comparison of SAI Pre-Assessment Scores with SAI Post-Assessment Scores	24
4	Frequencies of Scores on the CBPQ	25
5	Frequency Profile of Bem Sex Role Inventory Categories	26
6	Personal Commitment Responses by Frequency of Type of Commitment	28
7	Partial Correlation of SAI Adjusted Gainscores with Demographic Information, CBPQ, and Personal Commitment Total	29
8	Correlation of CBPQ with Demographic Information, SAI scores, and Personal Commitment Total	31
9	Correlation of Commitment Total and Demographic Information/ Instrument Scores	32
10	Analysis of Variance Main Effects	33
11	One-way Analysis of Variance Between Homemaking Teachers and Counselors on SAI Scores	36
12	Consistency of Responses on Pre- and Post-Tests	37
13	Workshop Evaluation	38

CHAPTER I

Introduction

Need for the Study

In our society, there is general agreement that schools should provide the type of educational opportunities that will enable students to develop to their fullest potential. In the past, with some exceptions, it was assumed that the educational system was doing a reasonably good job educating both males and females for their respective lives. However, the passage of Title IX of the Educational Amendments of 1972 prompted people to take a closer look at the equality of the educational opportunities for both sexes. Title IX forbids discrimination on the basis of sex to students and employees in all federally assisted educational programs in all institutions, public and private, receiving federal money through grants, loans, or contracts. As a result of Title IX, educators and educational institutions are charged with identifying and eliminating sex bias and sex stereotyping in the programs.

Congress was very specific with respect to vocational education. The Vocational Education Amendments of 1976, Public Law 94-482, state in the Declaration of Purpose, Part A, Sec. 101, that one of the four purposes of this part is to authorize Federal grants to States to assist them:

> to develop and carry out such programs of vocational education within each State so as to overcome sex discrimination and sex stereotyping in vocational education programs (including programs of homemaking), and thereby furnish equal educational opportunities in vocational education to both sexes.

Further examination of Public Law 94-482 reveals that the elimination of sex bias and sex stereotyping is mentioned over ten times in the vocational education sections. The Law specifically directs Consumer and Homemaking Education to:

> . . .encourage participation of both males and females to prepare for combining the roles of homemakers and wage earners; encourage elimination of sex stereotyping in consumer and homemaking education by promoting the development of curriculum materials which deal with increased numbers of women working outside the home, and increased numbers of men assuming homemaking responsibilities and the changing career patterns for women and men (Subpart 5, Sec. 150 A&B).

It is clearly evident in Public Law 94-482 that federal legislators believe that sex discrimination and sex stereotyping exists in vocational education in general and homemaking education in particular. The report of an on-site review of a Texas school district conducted during November 1973 documents those beliefs.

The Office of Civil Rights, Department of Health, Education, and Welfare, Region VI (Dallas) investigated the Waco Independent School District, Waco, Texas, because of a complaint of sex discrimination submitted by the Women's Equity Action League (WEAL). The summary letter to the Waco Independent School District from Dorothy D. Stuck, Dallas Regional Director, Office of Civil Rights, provides a concise statement of findings and recommendations. Pertinent sections of the letter which was dated July 1, 1974, relating to sex discrimination in vocational classes follow:

> Title IX prohibits practices which include course descriptions tending to exclude one sex or the other. Our investigation revealed that 11 vocational training courses are electives in the Waco Independent School District.

Administrators and counselors insisted that all electives are open to all students. . . .a few courses specify that both boys and girls are eligible (Home and Family Living, Home Furnishings, p. 40; General Crafts, General Drafting, Architectural Drafting, p. 42; Vocational Office Education, pp. 46, 47), while other courses in the same fields refer only to "the student" (Homemaking, Industrial Arts, Business Education). Where courses have traditionally been sex-segregated, the use of "he," or even the neutral "student," tends to perpetuate that segregation by implying that the course referred to is open only to one sex. . . Course descriptions should be redesigned to leave no question in anyone's mind that all courses and sections are open to all students regardless of sex.

Title IX prohibits differentiation in career counseling. Our investigation showed that teachers' and counselors' reluctance to change sex segregation patterns contributes to and perpetuates segregation by sex. Industrial arts and homemaking teachers commented that they wouldn't consider mixing boys and girls in their classes, and that there had never been enough students of the opposite sex to fill up a class for that sex. Some counselors insisted that they had never had a girl express an interest in a previously "all boys" class, and vice-versa. Others said that they had discouraged those students who had inquired about enrolling in a course dominated by the opposite sex, because they believed those students were not seriously interested. To counteract differential counseling practices, the district should initiate training for teachers and counselors on changing roles for women and men, and on the specific prohibitions of Title IX. These remedies should be designed to prevent both the perpetuation of sex-role stereotyping in counseling and teaching, and the further exclusion of students from courses by subtle discouragement from counselors and teachers.

Title IX prohibits exclusion of students from classes on the basis of sex. During the on-site review of Waco Independent School District, we found that, historically, the district has maintained several sex-segregated classes in its

> junior and senior high schools; health, physical education, home economics, industrial arts, Coordinated Vocational and Academic Education (CVAE), auto mechanics and other vocationally oriented classes. Our investigation also revealed that, in practice, most vocational education in Waco Independent School District is sex-segregated.
>
> In summary, the district must open all courses and sections to all students without regard to sex. After corrective action efforts, based on specific timetables, to recruit students of the sex formally discriminated against in traditionally sex-segregated classes, the district must apply a non-discriminatory policy of first-come, first-enrolled, until sufficient equipment is acquired to accommodate all who apply.

It is highly probable that the Waco Independent School District is not the only district in the nation or the state of Texas in which sex discrimination, sex bias, and sex stereotyping exist. Every school district and every educator probably is guilty of some form of sex discrimination or sex bias. The forms may be so subtle or so commonplace that they are not readily recognized.

Purpose of the Study

The purpose of this study was to develop and pilot test a model to create an awareness of sex bias and sex stereotyping in vocational education programs. A part of the study was concerned with helping educators identify their own sex biases. This project was designed to assist the State Board of Education in meeting one of the goals of vocational education as reported in the new Five-Year and Annual Programs Plans for Vocational Education. That goal as reported in the June 11, 1977 State Board of Education Report, is to develop a statewide awareness of programs and activities to reduce sex bias and sex stereotyping.

Review of Literature

Sex bias and sex stereotyping are not easily identified. Although some forms are overt and even flagrant, others are subtle and the result of tradition and/or long-standing discriminatory practices. Studies have shown that there are significant differences in the self-concept and aspirations of school age male and female children. It is true that the school is not totally responsible for the differences, but as one of the major socializing agencies in our society, it must assume some of the responsibility.

Smith (1969) found that as children became older, their opinions of males increased and their opinions of females decreased. The confidence and assertiveness in grade school males and females differed significantly. Males tended to be more confident and assertive while females were less confident and assertive (Minuchin, 1966). Hawley (1971) reported that female high school students exhibited a waning interest in career commitment. Females felt male students did not approve of a woman demonstrating her intelligence. McKee and Sheriffs (1957) reported that male and female college students showed a high degree of agreement about personality characteristics. They found that personality characteristics generally linked with masculinity were considered more valuable than those linked with femininity.

The differences between male and female attitudes are perpetuated by the educational materials used in the classroom. Not only is subject matter taught, but sex roles as well. School texts have often been found to present biased viewpoints of males and females. A critical examination of texts by U'Ren (1971) showed that females were depicted as having less moral strength compared to males. In addition females were

shown as being less capable of independent thinking and as giving up more easily than males.

Hutton (1976) critiqued six junior high school home economics texts for sex bias in their illustrations. A total of 1,116 illustrations were examined. The findings indicated extensive sex bias. Generally, males were shown giving advice to young children, and females were shown entertaining children or helping with their care. Compared to females, males were more often seen participating in active play, studying or in deep reflective thought, demonstrating maturity and independence, possessing aggressive characteristics, and working in a variety of career opportunities. Females, more often than males, were shown demonstrating concern about weight control, exhibiting so-called "feminine" behavior--shyness, fearfulness, indecisiveness, jealousy, cooperation, patience, and so forth.

When interactions in the classroom were examined carefully, some significant differences were found in the treatment of males and females. Levitin and Chananie (1972) report that when male and female students were characterized as being dependent and aggressive, teachers showed the greatest liking for the dependent female and the greatest dislike for the aggressive female. Spaulding (1963) reported that when classroom interaction patterns were analyzed, male students were the recipients of more of the teachers' attention than females were. Teachers listened to males more and gave them more instruction, approval, and disapproval.

Professional educators need to become cognizant of the stereotypical expectations they often hold for females and males. It is also imperative to move beyond awareness and act to eliminate discrepancies which exist. Sadker and Sadker (1975) propose a list of competencies

teachers should attain with respect to the elimination of sexism in education. Four general areas of competencies were identified: awareness, clarification, classroom behaviors, professional and societal behavior. Four specific competencies of interest categorized under classroom behavior involved: a) structuring school activities so that home economics can become a more viable option for males; b) encouraging the career and leadership aspirations of females; c) accepting dependence in males and independence in females; and d) encouraging risk-taking in females.

In a Phi Delta Kappan article, Trecker (1973) takes secondary education programs to task about blatant discrimination in vocational and physical education programs in terms of enrollment by sex and stereotypical curriculum offerings based on physical and attitudinal differences. She states:

> The removal of stereotypes and the development of a curriculum which is appropriate for both female and male students is a complex procedure requiring the cooperation of teachers, administrators, counselors, and educational publishers. (p. 112)

In "What To Do About Sex Bias In The Curriculum," Naiman (1977) makes several specific suggestions. Included are:

> Develop and implement a plan for in-service training of all personnel who select, purchase recommend, or use textbooks and other instructional materials.
>
> Call on state departments of education, teacher-training institutions, and professional associations to provide materials, workshops, and technical assistance. (p. 11)

Consumer and Homemaking Education in Texas leads the nation in numbers of males enrolled in vocational homemaking classes. The annual report information for 1975-76 indicates that 46,985 male students were

enrolled in homemaking courses. That was 22% of the total number of students enrolled. The national average was 3%.

Although the enrollment figures for males in homemaking classes in Texas is impressive compared to the national average, the numbers still generate concern. A more ideal situation would be to have a higher proportion of males enrolled. The reasons larger numbers of males are not choosing homemaking can be many and varied. It can be assumed that one of the reasons is the existence of sex stereotyping in homemaking courses.

The question can legitimately be raised concerning whether the sex stereotyping is a reflection of some of the different types of biases cited in the review of literature. In addition, the subject matter may be related more to female interests than to male interests, and feminine behavior patterns may be encouraged. With the increasing numbers of women entering the working world, it would seem necessary to determine if the homemaking teacher is preparing both males and females for the roles of wage earners and homemakers. Educators have a commitment, indeed a charge, to work toward providing the best education for both females and males.

Objectives of the Study

In light of the responsibility educators have with respect to providing equal opportunity and equal treatment to students of both sexes, it is paramount that all vocational educators become aware of their own sex biases and stereotypes. A systematic plan would appear to be the best method of reaching all vocational teachers. This project developed such a plan.

The objective of the project was to develop and pilot test a

model to create an awareness of sex bias and sex stereotyping in vocational programs.

Additional funding will be requested at a later date for continuation of the project into a second and a third year. During the second year the model will be implemented with the homemaking teachers in the state. The third year will be used for follow-up studies. The objective for the second year will be to determine the immediate effect of the in-service sessions on awareness of sex bias and sex stereotyping in the classroom. The objective for the third year will be to determine if an increase in the degree of awareness of sex bias and sex stereotyping in the clas room does in fact eliminate those behaviors from the classroom.

CHAPTER II

Procedure

Subjects

The model was developed and tested using Consumer and Homemaking Education teachers in Texas as the population. This group of teachers was chosen for the following reasons: 1) Public Law 94-482 specifically mandated that Consumer and Homemaking Education encourage the elimination of sex bias and sex stereotyping in its programs; 2) because Consumer and Homemaking Education is the largest public school vocational program in Texas with approximately 3,000 teachers and 236,545 students, a greater impact could be made in the state than with a smaller program; and 3) the project director and principal consultant were more knowledgeable in this area because of their secondary and university teaching experiences.

In order to get the male point of view at the workshop sessions, male vocational counselors were invited to be participants. Vocational counselors were chosen because they were included under the mandate in Public Law 94-482 and because they have much influence on the students who elect to enroll in homemaking classes.

Development and Pilot Testing of Workshop Materials

The first step in carrying out the project was for the project director and major consultant to study a set of materials entitled WE in in Education. These materials were developed as part of a grant from the Women's Equality in Education program. The project was conducted pursuant to Grant OEG-0-70-4051 with the United States Office of Education to

the Texas Education Agency. The project began in September 1975 and ended in September 1977. Ms. Terry Masters was director of the project. The WE in Education materials consist of twenty lessons with related study and activity sheets which were being used with educators throughout Texas to 1) make educators aware of the existence of sex discriminatory practices in society and in education institutions, and 2) present ways to eliminate such practices. The WE in Education materials are based to a large extent upon the legalities of Title IX and are focused primarily upon sex discrimination as it may be practiced in a school. Examples which are used are by necessity general in nature because of the backgrounds, interests, and job responsibilities of the variety of educators who participated in the in-service sessions.

The second step consisted of designing the workshop activities, instruments, and schedule. The WE in Education materials were adapted for use with a specific group--vocational homemaking teachers. All of the twenty modules were not appropriate for the target group so some new activities were developed. Three research assistants assisted the project director and major consultant in adapting and developing the materials and instruments.

The completed workshop materials are composed of an introductory slide presentation which provided an overview of sex stereotyping and five group exercises. The slides were adapted, with permission, from a filmstrip developed by Amanda Smith for the New Pioneers program in North Carolina. The title is "I'm Glad I'm a She! I'm Glad I'm a He!" The titles and objectives of each exercise are:

a. "The Exchange" focuses on participants' reactions to the slide presentation.

b. "A Closer Look" describes and contrast the way females, males, and well-adjusted adults are perceived.

c. "Taking Stock" identifies and examines personal attitudes related to the roles of men and women.

d. "What a Difference a Word Makes" identifies the ways sex stereotyping is projected in conversations, textbooks, and other educational resources.

e. "Building Our Image" identifies classroom behaviors/practices that perpetuate sex bias and sex stereotyping and those that minimize or eliminate sex bias and sex stereotyping.

Three assessment instruments were designed to be used during the workshop. The instruments are:

a. Sexism Awareness Instrument - a narrative of one school day in the life of a vocational homemaking teacher. Participants identify each evidence of sexism appearing in the narrative by underlining it and briefly explaining why it is considered sexist.

b. Current Behavior Practices Questionnaire - a listing of sexist teacher behaviors. Participants indicate the frequency with which they engaged in the specific behavior practices listed.

c. Personal Commitment Sheet - an open-ended instrument which gives participants an opportunity to list the steps they plan to take toward eliminating sexism.

Another instrument, the Bem Sex Role Inventory, developed and validated by Dr. Sandra Bem of Stanford University, is used to determine the androgyny score of the participants.

The validity of the Sexism Awareness Instrument and the Current

Behavior Practices Questionnaire was established in two ways. The instruments were given to a class of college students to determine face validity. A record of how long it took the students to complete each instrument was made in order to achieve an approximate time limit for the instruments. Clarity of the instruments was determined through a class discussion at the end of class. Content validity was established by a panel of four experts considered knowledgeable in the area of sex bias and sex stereotyping. The panel determined the items in the instruments which were labeled sexist and those labeled non-sexist. On the basis of their responses the instruments were revised and the scoring keys were developed.

The third step was a pilot study which was conducted in order to test the workshop activities, the materials, and the assessment instruments. Thirty-one vocational homemaking teachers, four male counselors, one home economics area consultant, and six home economics teacher educators participated in the pilot testing. Because there are only one or two male homemaking teachers in the state, it was necessary to bring in males from outside the target population in order to get the male point of view. Counselors were chosen because their biases and attitudes about homemaking determine their practices in advising students to take or not take homemaking. Ms. Masters and other persons involved in the WE in Education project advised that to get a true test of materials and procedures that some males needed to be involved in the pilot testing and also in the training of persons who would be using the materials.

At the same time that the materials were being pilot tested, the teacher educators were trained in the use of the materials. This was done so that they could assist in training facilitators who would be used

during fall 1978 and spring 1979 to direct in-service sessions for all the homemaking teachers in the state.

During the pilot testing, at the conclusion of each activity, participants were asked to state whether they liked or disliked the activity and to make suggestions for improvements. The quantitative results of the evaluation were as follows:

Activity	Liked Very Much	OK	Disliked	Missing Responses
	N	N	N	N
Introductory Slide Presentation	37	4	1	0
The Exchange	34	6	2	0
A Closer Look	35	7	0	0
Taking Stock	36	5	1	0
What a Difference a Word Makes	22	14	1	5
Building Our Image	23	13	4	2
Personal Commitment	20	16	5	1

Data were collected and tabulated for each of the assessment instruments. The following results were obtained:

Current Behavior Practices Questionnaire

A tabulation of participants' responses on the Current Behavior Practices Questionnaire was accomplished by assigning a value of 1 for each non-sexist behavior practiced checked and 0 for each sexist behavior practice checked. The highest score (most non-sexist score) which could be attained was 20. The results are reported in the following frequency distribution:

TOTAL POINTS	N
20	0
19	2
18	3
17	4
16	3
15	5
14	7
13	5
12	4
11	2
10	1
9	1
8	2
7	2
6	1
	Total 42

Critiques of the Current Behavior Practices Questionnaire revealed the following information:

Specifics	Very Clear	OK	Unclear	Missing Responses
	N	N	N	N
Directions	42	0	0	0
Situations	40	1	0	1
Clarity of Wording	33	7	2	0

	Too Short	OK	Too Long	Missing Responses
Length	3	34	4	1

	Liked Very Much	OK	Disliked	Missing Responses
Overall Rating	30	12	0	0

Sexism Awareness Instrument

The pre-workshop and post-workshop Sexism Awareness Instrument

scores were compared statistically using a t-test. A t-value of 5.58 was obtained. This is significant beyond the .001 level (df=41). Because there was a statistically significant difference between participants' pre- and post-Sexism Awareness Instrument scores, it can be stated that there was a significant gain in the participants' degree of awareness of sex bias and sex stereotyping as a result of the workshop.

Critiques of the Sexism Awareness Instrument revealed the following:

Specifics	Liked Very Much	OK	Disliked	Missing Responses
	N	N	N	N
Length of Instrument	0	30	11	1
Clarity of Directions	29	9	3	1
Examples of Sexism (Narrative)	3	37	1	1
Theme of Directions	26	14	1	1
Theme of Narrative	28	11	1	2
Overall Rating	27	13	0	2

Personal Commitment Sheet

Responses to the Personal Commitment Sheet revealed the following:

Types of Commitments	N
Eliminating sexist language	21
Pointing out sexism to others and becoming more aware myself	21
Helping students widen career options	11
Eliminating assignment of task by sex	11

Types of Responses	N
Treating both sexes equally	10
Avoiding stereotyped assumptions about one sex or the other	6
Evaluating resources for sexism	4
Recruiting both males and females for all classes & FHA	3
Getting Deans of Students & Coaches to work together to eliminate sexism	1

At the completion of the workshop, an oral evaluation was conducted with the teacher educators and the area consultant. Changes and improvements were suggested for the individual activities, the materials, and the assessment instruments. On the basis of all the participants' critiques and suggestions, the activities, the materials, and the assessment instruments were revised.

Selection of Participants for Study

Efforts were made to get 100 home economics educators to serve as participants in the study. In addition, they would be facilitators for the area in-service sessions during the 1978-79 school year. Each of the ten area homemaking consultants was asked to recommend ten homemaking educators from their areas. Acceptances were received from 81. They participated as subjects in the study and were trained to serve as group facilitators for the sex bias and sex stereotyping workshops. Fourteen male vocational counselors were also invited to attend the training sessions in order to provide a male point of view and to be subjects in the study. The six teacher educators trained during the pilot testing, assisted the project director and major consultant in training the facilitators.

Data Collection and Analysis Procedures

The Sexism Awareness Instrument, used to determine how many evidences of sexism can be identified, was administered at the beginning and at the end of the workshop. The scores from the pre-tests and post-tests were analyzed using a t-test to determine whether there was a significant difference in the teachers' awareness of sex bias and sex stereotyping after the workshop as compared to before the sessions. The effectiveness of the in-service program in increasing teachers' awareness of sex bias ans sex stereotyping was assessed in terms of the gainscores from pre-test and post-test.

Data collected using the Current Behavior Practices Questionnaire, the Personal Commitment Sheet, and the Bem Sex Role Inventory were tabulated and analyzed. Because the Current Behavior Practices Questionnaire was administered at the beginning of the workshop, the responses could be compared with the commitments made at the end of the workshop to determine if an increase in level of awareness does in fact lead to change in attitudes and practices. The results of the Bem Sex Role Inventory were correlated with responses to the Sexism Awareness Instrument and the Current Behavior Practices Questionnaire.

CHAPTER III

Results of the Study

Sample

A total of 95 persons participated in the study. Eighty-one were home economics educators and 14 were male vocational counselors. In order to protect the rights of the subjects, the participants were given the option of completing or not completing some of the assessment instruments as they desired. As a result, completed instruments were not available for all 95 persons.

An information sheet (see Appendices) was used to obtain a description of the participants. Frequencies of the responses were computed using the Statistical Package for the Social Sciences (SPSS), subprogram FREQUENCIES. Table 1 gives the tabulation of the data.

Table 1

Profile of Sample

(n=95)

Item	Number	%*
Sex		
Female	81	85
Male	14	15
Position		
Homemaking Teacher	73	76
Counselor	14	15

Table 1--Continued

Item	Number	%*
Teacher Educator	4	4
Supervisor	3	3
Other	1	1
Age		
21-25	12	13
26-30	19	20
31-40	26	27
41-50	17	18
over 50	19	20
Missing Data	2	2
Experience as Public School Educator		
1-3 years	20	21
4-6 years	8	8
7-10 years	20	21
11-15 years	11	12
16-20 years	15	16
over 20 years	19	20
Missing Data	2	2
Degrees Received		
Bachelors	81	85
Masters	42	44
Doctorate	3	3
Missing Data	14	15

Table 1--Continued

Item	Number	%*
Classification of School		
B	5	5
A	12	13
AA	14	15
AAA	16	17
AAAA	40	42
Missing Data	8	8
Previous Exposure to Sexism Workshops		
None	77	81
1-2 Hours	4	4
Half Day	3	3
1 Day	4	4
More than 1 Day	5	5
Missing Data	2	2
Actively Seek Information on Sexism		
Yes	58	61
No	35	37
Missing Data	2	2

*Some totals do not equal 100% due to rounding of numbers.

All of the home economics educators were female. Seventy-three were secondary homemaking teachers, four were teacher educators, three were supervisors, and one held another position. As a result of the design of the study, all of the counselors were male. Ages of the participants

ranged from 21 to over 50 years with the largest number (27%) falling in the 31-40 year range. The years of experience as a public school educator were fairly evenly distributed from 1-3 to over 20. Fourteen persons did not respond to the item requesting degrees received. Although it was known that all 95 participants had a bachelors degree, only 81 indicated the degree. Forty-four percent (42 persons) of the participants marked that they had earned a masters degree and three percent (3 persons) checked that they had a doctorate. The majority of the secondary school educators worked in Class AAA and Class AAAA schools which are the largest schools in the state. Seventeen percent checked AAA; 42 percent, AAAA. When asked to indicate exposure to previous sexism workshops, 81 percent stated that they had not attended any workshops. In response to the next item on whether or not they actively seek information on sexism, 61 percent, however, marked that they do.

Additional information was requested of the homemaking teachers (Table 2).

Table 2

Teaching Concentration of Homemaking Teachers and Percentages of Males in Classes

(n=73)

Item	Number	%
Teaching Concentration		
Useful Homemaking	53	73
Gainful Homemaking	8	11
Combination of Useful and Gainful	12	16
Total	73	100

Table 2--Continued

Item	Number	%
Percentage of Males in Classes		
0-25%	45	62
26-50%	23	32
51-75%	5	7
76-100%	0	0
Total	73	101*

*Does not equal 100% due to rounding of numbers.

The 73 homemaking teachers were asked to indicate their teaching concentration. Seventy-three percent taught useful homemaking, the program which prepares students for the occupation of homemaker. Eleven percent prepared students for employment in home economics related occupations through gainful homemaking classes. In response to a question concerning percentages of males in their classes, 62 percent of the homemaking teachers checked that 0-25% of their students were male. Thirty-two percent indicated that in their classes 26-50% were males. Only seven percent of the teachers had over 50% male enrollment.

Analysis of Data

Data were collected and analyzed for all of the assessment instruments. The results are reported for each instrument.

The effectiveness of the workshop in increasing the degree of awareness of sex bias and sex stereotyping was measured using the Sexism Awareness Instrument (SAI). The instrument was given as a pre-test at the beginning of the workshop and as a post-test at the end of the workshop. Participants identified each evidence of sexism on the instrument

and explained why the item was sexist. There were 34 sexist items on the SAI. Respondents were given one point for each correct identification and an additional point for each correct explanation. Total possible points were 34 for identification and 34 for explanation, making a total possible score of 68.

A t-test was used to compare the means of the pre-test total scores with the means of the post-test total scores to determine whether they were significantly different. Table 3 indicates the results.

Table 3

Comparison of SAI Pre-Assessment Scores

With SAI Post-Assessment Scores

(n=95)

	M	SD	t	df	p
Pre-Assessment Total	35.7789	12.257	4.47	94	.0001
Post-Assessment Total	41.9895	13.775			
Pre-Assessment Identification	20.3474	6.706	4.49	94	.0001
Post-Assessment Identification	24.0316	7.285			
Pre-Assessment Explanation	15.4316	6.506	3.74	94	.0001
Post-Assessment Explanation	17.9579	7.276			

The data revealed that the two means were significantly different at the .0001 level. In addition, the Pre-Assessment Identification and Explanation means were both significantly different from the Post-Assessment Identification and Explanation means ($p=.0001$). These results indicate that the workshop was effective in increasing the degree of awareness of sex bias and sex stereotyping of the vocational educators included in the study.

The Current Behavior Practices Questionnaire (CBPQ) obtains a

self-report of sexist behaviors/practices which educators exhibit. The score on the CBPQ is computed by assigning a value of 1 for each non-sexist behavior practice and a value of 0 for each sexist behavior practice checked. The highest possible score is 20 points. The higher the score, the more non-sexist the behaviors of the respondent. Table 4 reports the number of subjects who made each score.

Table 4

Frequencies of Scores on the CBPQ

(n=95)

Total Points	N	%
20	0	00
19	4	04
18	6	06
17	7	07
16	11	12
15	10	11
14	10	11
13	13	14
12	5	05
11	6	06
10	5	05
9	5	05
8	3	03
7	2	02
6	1	01
5	2	02
4	1	01
3	1	01
2	0	00
1	0	00
Missing Data	3	03
Total	95	

Eighty-one percent (77) of the subjects scored 10 or more points; whereas 40 percent (38) scored 15 or more points. Only four respondents (4%) scored five or lower on the questionnaire.

Table 5 presents the number of subjects classified according to four sex role categories as indicated by tabulation of the responses to the Bem Sex Role Inventory.

Table 5

Frequency Profile of Bem Sex Role Inventory Categories

(n=95)

Sex	Androgynous		Masculine		Feminine		Undifferentiated		Total
	N	%	N	%	N	%	N	%	
Female	22	29	16	21	15	20	23	31	76
Male	2	17	4	34	4	34	2	17	12
Total	24	27	20	23	19	22	25	28	88*

*Missing Data=7

The current classification is a revision of Bem's original sex role categories. Originally Bem subtracted the subjects' masculine scores from their feminine scores. This procedure resulted in three sex role categories: Androgynous, Masculine, and Feminine. According to Bem the Androgynous sex role category reflects nonstereotyped individuals who are flexible in performing activities without regard for their stereotypes as masculine or feminine. The Masculine and Feminine sex role categories reflect traditional stereotypes of males and females. Other researchers have recommended that the statistical procedure be altered to yield four sex role categories. This would divide Bem's Androgynous category into Androgynous and Undifferentiated sex role categories. According to the revision, which Bem has accepted, Androgynous sex role represents a person who possesses an equally high proportion of both masculine and feminine personality characteristics, and Undifferentiated sex role

represents a person who possesses an equally low proportion of masculine and feminine personality characteristics. Masculine sex role represents a person who possesses a higher proportion of masculine personality characteristics while a Feminine sex role represents a person who possesses a higher proportion of feminine personality characteristics. The revision was made to account for those differences in individuals who possess a high proportion of both masculine and feminine characteristics as opposed to those who have a low proportion of both. The criticism stems from the argument that people with low propcrtions of masculinity and femininity characteristics will be even less adaptable to various situations than the stereotyped Masculine and Feminine categories.

Another criticism of Bem's original Sex Role Inventory deals with the inclusion of the words "masculine" and "feminine" in the list of adjectives. Analysis has revealed that these two words account for a large part of the variance. The raw masculinity score and raw femininity score would be more valid if the terms "masculine" and "feminine" were omitted from the inventory.

Based upon the recommended revisions of the Bem Sex Role Inventory, the present study employed the four sex role category classifications and omitted the terms "masculine" and "feminine" in calculating the subjects' raw scores on masculinity and femininity. The frequencies in Table 5 indicate that more females (60%) were in the Androgynous and Undifferentiated sex role categories while more males (68%) were in the Masculine and Feminine sex role categories.

Frequencies of responses to the Personal Commitment are recorded in Table 6.

Table 6

Personal Commitment Responses by Frequency of Type of Commitment

	Type of Commitment	N	%
1.	Examine and change own sexist teaching practices	61	24
2.	Clarify own feelings and take action professionally	34	13
3.	Make others aware of sex stereotyping	33	13
4.	Avoid using sexist terminology	26	10
5.	Encourage students to pursue non-traditional careers	22	09
6.	Develop learning activities for classroom	21	08
7.	Help students become aware of sexism	16	06
8.	Evaluate curriculum to eliminate sex stereotyping	14	05
9.	Evaluate teaching materials for sex bias	11	04
10.	Make home economics more interesting for males and females	7	03
11.	Assist in awareness programs	6	02
12.	Be more open-minded about changes in society	4	02
13.	Look into sex role socialization of children	1	00
14.	Learn more about ways to eliminate sex stereotyping	1	00
15.	Assert self more	1	00
16.	Help students improve their image	1	00
	Total	259	101*

*Does not equal 100% due to rounding of numbers.

The Personal Commitment was composed of two open-ended statements. One statement was: "I look forward to trying these things as a step toward eliminating sexism." The second asked the respondents to indicate what

they would start with the first week. A total of 259 commitments were made. After the commitments were made, the responses were examined for similarities. On the basis of this examination, sixteen categories were established for the types of commitments. Frequency of each type of commitment was recorded in addition to the commitment total. Sixty percent of the responses fell into the first four categories. This indicates that subjects volunteered to eliminate sex bias and sex stereotyping in a general sense by: 1) examining and changing their own sexist practices (24%); 2) clarifying their own feelings and taking action professionally(13%); 3) making others aware of sex stereotyping (13%); and 4) avoiding using sexist terminology (10%). Other responses dealt more specifically with teaching: 5) encourage students to pursue non-traditional careers (9%); 6) develop learning activities for the classroom (8%); 7) evaluate curriculum (5%); and 8) evaluate teaching materials to eliminate sex bias and sex stereotyping (4%).

A partial correlation of the Sexism Awareness Instrument (SAI) adjusted gainscores with the discrete categories of demographic information, the Current Behavior Practices Questionnaire (CBPQ), and the Personal Commitment total is shown in Table 7.

Table 7

Partial Correlation of SAI Adjusted Gainscores With Demographic Information, CBPQ, and Personal Commitment Total

Information/Scores	n	r	p
Age	90	-.0266	.801
Experience as Public School Educator	90	-.0894	.397
Year Bachelors Degree Received	78	.0970	.392

Table 7--Continued

Information/Scores	n	r	p
Year Masters Degree Received	39	.1207	.452
Classification of School	84	-.0635	.561
Percentage of Males in Classes	70	-.3299	.005*
Previous Exposure to Sexism Workshops	90	-.3107	.003*
CBPQ Nonsexist Score	86	.1394	.195
Commitment Total	92	.4585	.001*

*Statistically significant

A partial correlation statistical procedure was necessary in order to adjust the post-test scores by taking the pre-test scores into account. This adjustment was necessary to equalize the scores of those persons who scored very high on the pre-test and, as a result, could not make much gain before reaching a perfect score,with those persons who scored low on the pre-test and, therefore, could make great gains on the post-test. An examination of the data reveals that the percentage of males in the teachers' classes and previous exposure to sexism workshops both had a statistically significant correlation with the SAI adjusted gainscores at the p=.005 and p=.003 levels respectively. These correlations, however, were negative. As the percentage of males in the classes increased, the gainscores decreased. In a similar manner, as the exposure to sexism workshops increased, the gainscores decreased.

One item did have a highly significant statistical positive correlation at the p=.001 level with the SAI adjusted gainscores. This was the Personal Commitment total. As the gainscores increased, the total number of commitments increased. Age, years experience as a public

school educator, year degrees were received, size of schools, or the score on the CBPQ had no statistically significant correlations with the SAI adjusted gainscores.

Table 8 indicates the correlation of the Current Behavior Practices Questionnaire with the demographic information, scores on the Sexism Awareness Instrument, and the Personal Commitment total.

Table 8

Correlation of CBPQ with Demographic Information, SAI Scores, and Personal Commitment Total

Information/Scores	n	r	p
Age	88	-.0769	.477
Experiences as Public School Educator	88	-.1321	.220
Year Bachelors Degree Received	77	.0665	.565
Year Masters Degree Received	42	.0491	.757
Classification of School	82	-.1173	.294
Percentage of Males in Classes	68	.1921	.117
Previous Exposure to Sexism Workshops	88	.0850	.431
Commitment Total	89	.2158	.042*
SAI Adjusted Gainscores	86	.1394	.195

*Statistically significant

The results reveal that the only statistically significant correlation was between the CBPQ and the Commitment Total (p=.042). As the nonsexist score on the CBPQ increased, the total number of commitments also increased. There were no significant correlations between the CBPQ and the demographic data or the adjusted gainscores on the Sexism

Awareness Instrument.

Table 9 shows the correlation of the Personal Commitment total with the demographic information. None of the items were statistically significant. Tables 7 and 8 had previously reported significant positive correlations of the Personal Commitment total with the Current Behavior Practices Questionnaire and the Sexism Awareness Instrument.

Table 9

Correlation of Commitment Total and Demographic Information/Instrument Scores

	n	r	p
Age	93	.0036	.973
Experience as Public School Educator	93	.1363	.193
Year Bachelors Degree Received	81	-.0173	.878
Year Masters Degree Received	42	.1460	.356
Classification of School	87	-.0622	.567
Percentage of Males in Classes	73	.0048	.968
Previous Exposure to Sexism Workshops	93	-.1109	.290

An analysis of variance was run using the ANOVA computer program. Table 10 shows the results of the main effects of the analysis of variance with the three researcher-developed instruments as dependent variables and the discrete categories of demographic information as independent variables. The data reveal that the sex and position of the respondent make a difference with regard to scores on the Sexism Awareness Instrument (SAI), Current Behavior Practices Questionnaire (CBPQ), and the total number of personal commitments (Com Total) made. The SAI was given both as a pre-test and a post-test. As a result, subjects had a pre-test total (SAI Pre-test Total) and a post-test total (SAI Post-test Total).

In addition, a SAI gainscore was computed which adjusted the post-test score taking into account the pre-test score. The commitment total and the CBPQ scores were done similarly. Because the CBPQ was given at the beginning of the workshop, it was considered a pre-test. The Personal Commitment was given at the end of the workshop, and, therefore, was considered a post-test. After the computation, the Com Total/CBPQ Adjusted Gainscore resulted.

Table 10

Analysis of Variance Main Effects

Dependent Variable	Independent Variable	SS	df	MS	F	p
SAI Pre-test Total	Sex	2410.0	1	2410.0	21.13	.001*
SAI Post-test Total	Sex	2405.1	1	2405.1	16.4	.001*
SAI Adjusted Gainscore	Sex	878.6	1	878.6	6.36	.014*
CBPQ	Sex	386.3	1	386.3	7.78	.007*
Commitment Total	Sex	61.4	1	61.4	27.99	.001*
ComTotal/CBPQ Adjusted Gainscore	Sex	52.0	1	52.0	23.54	.001*
SAI Pre-test Total	Position	3200.2	4	800.1	7.34	.001*
SAI Post-test Total	Position	4831.2	4	1207.8	9.48	.001*
SAI Adjusted Gainscore	Position	2809.0	4	702.3	5.77	.001*
CBPQ	Position	66.5	4	16.6	7.87	.001*
Commitment Total	Teaching Concentration	83.7	2	41.8	.40	.672

Table 10--Continued

Dependent Variable	Independent Variable	SS	df	MS	F	p
SAI Post-test Total	Teaching Concentration	200.4	2	100.2	.79	.457
SAI Adjusted Gainscore	Teaching Concentration	248.3	2	124.1	1.00	.372
CBPQ	Teaching Concentration	15.6	2	7.8	.18	.840
Commitment Total	Teaching Concentration	.6	2	.3	.12	.891
Com Total/CBPQ Adjusted Gainscore	Teaching Concentration	.4	2	.2	.08	.923
SAI Pre-test Total	Education Level	132.5	1	132.5	.88	.350
SAI Post-test Total	Education Level	177.9	1	177.9	.94	.336
SAI Adjusted Gainscore	Education Level	54.4	1	54.4	.36	.551
Com Total/CBPQ Adjusted Gainscore	Education Level	6.0	1	6.0	2.22	.140
SAI Adjusted Gainscore	Percentage Male in Classes	1365.1	2	682.6	6.36	.003*
SAI Adjusted Gainscore	Exposure to Sexism Work-shops	2401.0	4	600.3	4.60	.002*
SAI Adjusted Gainscore	Commitment Total	538.7	5	107.7	1.41	.228
Commitment Total	Age	3.0	4	3.3	1.11	.355

*Statistically significant

Table 10 revealed that the sex of the subject made a statistically significant difference at the .01 or lower probability level with regard to the first six items on the table; SAI Pre-test Total, SAI Post-test Total, SAI Adjusted Gainscore, CBPQ, Commitment Total, and Commitment Total/CBPQ Adjusted Gainscore. A post hoc examination of the means showed that the females scored higher than the males on each of the instruments.

The job position which the respondent held made a statistically significant difference at the .001 probability level on the SAI Pre-test Total, SAI Post-test Total, SAI Adjusted Gainscore, and Commitment Total/CBPQ Adjusted Gainscore. Position was divided into five discrete categories: homemaking teacher, counselor, teacher educator, supervisor, and other. The post hoc examination of the means with regard to position revealed that home economics supervisors had the highest means and vocational counselors had the lowest on each of the various instruments.

Percentage of males in the homemaking classes and exposure to sexism workshops both made a statistically significant difference at the .003 and .002 probability level respectively with regard to the subjects' SAI Adjusted Gainscores. Post hoc analysis of the means revealed that the teachers with lower percentages of males in their classes made greater gainscores than those teachers with greater percentages of males. The subjects with less exposure to sexism workshops made greater gainscores than those with more exposure to workshops.

Teaching Concentration did not make a significant difference in the scores on the Sexism Awareness Instrument, the Current Behavior Practices Questionnaire, nor the Personal Commitment. Educational Level was divided into two discrete categories--those with a bachelors degree and those with

more than a bachelors degree. Education Level also did not make a significant difference on the scores of the three researcher-developed instruments. The total number of commitments made did not make a significant difference on the SAI Adjusted Gainscore. In addition, Age did not make a significant difference on the Commitment Total.

Table 11 presents the results of a one-way analysis of variance between two of the five categories listed under position of the participants. This breakdown was done to determine if there was a significant difference between counselors and homemaking teachers with regard to scores on the Sexism Awareness Instrument.

Table 11

One-way Analysis of Variance Between Homemaking Teachers and Counselors on SAI Scores

Source	df	SS	MS	F	p
Pre-test Total by Position					
Between	1	2226.5831	2226.5831	20.274	.0001*
Within	83	9115.3699	109.8237		
Total	84	11341.9529			
Post-test Total by Position					
Between	1	2390.3073	2390.3073	13.335	.0001*
Within	83	10820.4692	130.3671		
Total	84	13210.7765			
Pre-test Identification by Position					
Between	1	686.5767	686.5767	20.906	.0001*
Within	83	2725.7763	32.8407		
Total	84	3412.3529			
Post-test Identification by Position					
Between	1	531.0092	531.0092	14.571	.0001*
Within	83	3024.6849	36.4420		
Total	84	3555.6941			

Table 11--Continued

Source	df	SS	MS	F	p
Pre-test Explanation by Position					
Between	1	440.3314	440.3314	13.978	.0001*
Within	83	2614.6804	31.5022		
Total	84	3055.0118			
Post-test Explanation by Position					
Between	1	668.0743	668.0743	17.095	.0001*
Within	83	3243.6199	39.0798		
Total	84	3911.6941			

*Statistically significant

A post hoc analysis of the means revealed that there was a statistically significant difference in the scores of the teachers and the counselors at the .0001 level on the pre- and post-test total scores, identification scores, and explanation scores. In each instance the teachers scored consistently higher.

Table 12 indicates the subjects' consistency in responding to respective items on the pre-test as compared with the post-test.

Table 12

Consistency of Responses on Pre- and Post-Tests

Response Pattern		% of Total Responses
Identification Response		
Pre-test Wrong	Post-test Wrong	10%
Pre-test Wrong	Post-test Right	10%
Pre-test Right	Post-test Wrong	5%
Pre-test Right	Post-test Right	26%
Explanation Response		
Pre-test Wrong	Post-test Wrong	17%
Pre-test Wrong	Post-test Right	10%
Pre-test Right	Post-test Wrong	6%
Pre-test Right	Post-test Right	16%
	Total	100%

The patterns most reflective of an increase in awareness were Pre-test Wrong/Post-test Right patterns (20% of the total responses). Pre-test Wrong/Post-test Wrong patterns (27%) indicate no increase in awareness from Pre-test to Post-test. Pre-test Right/Post-test Wrong patterns (11%) indicate a decrease of awareness. Pre-test Right/Post-test Right patterns (42%) indicate a stable awareness.

The overall workshop evaluation comments are reported in Table 13.

Table 13

Workshop Evaluation

Topic	Comment	Number of Responses	%
Length			
	Too short	8	8.5
	OK	83	88.3
	Too long	3	3.2
	Total	94	100.0
Content			
	Liked Very Much	41	68.3
	OK	19	31.7
	Disliked	0	0.0
	Total	60	100.00
Specific Comments			
Liked			
	Well organized	37	15.0
	Small groups	32	13.0
	Open discussion and group interaction	32	13.0
	Interesting and worthwhile content, varied pace	29	11.8
	Becoming more aware of sex bias	25	10.1
	Well informed and enthusiastic leaders	13	5.3
	Well presented	9	3.6
	Male participation	4	1.6
	Content can be used in my classroom	4	1.6
	Excellent meeting arrangements	4	1.6
	Slide presentation	3	1.2
	Evaluations easy to respond to	1	.4
		Subtotal	78.2
Disliked			
	Last activity (Building Our Image)	20	8.1
	Time pressure	11	4.5
	Need more men	5	2.0

Table 13--Continued

Topic	Comment	Number of Responses	%
Disliked (con't)			
	Unsure how to implement area meetings	5	2.0
	Need to move and stretch more	2	.8
	Concern about taxpayer's expense	2	.8
		Subtotal	18.2
Other			
	Be sure to include administrators and counselors	9	3.6
		Total 247	100.0

The results indicate that the Awareness Workshop was accepted positively and favorably by the majority of the participants. Over three-fourths (88.3%) of the participants felt the length of the workshop was about right. Eight (8.5%) stated that the workshop was too short; whereas, three (3.2%) indicated that it was too long. Sixty-eight percent of the participants liked the content of the workshop very much and 31.7 percent thought the content was okay. The evaluation form asked for specific comments about 1) things liked most, 2) things liked least, and 3) other comments. The frequency of the responses indicate that 78.2% of the comments were under the "Liked" category and only 18.2% of the comments were under the "Disliked" category. The categories with the largest frequencies of responses concerned the basic organization and logistics of the workshop.

Following are some comments taken directly from the participants' evaluation forms:

> "The workshop was beneficial. More teachers should be made aware of sex bias."
>
> "I think sex awareness is important and should be a vital part of our education in preparation for teaching."

"This has been very worthwhile and came at just the right time in my teaching career."

"Administrators should be informed of workshop and let them be forced to use some of the information so that they can run a better school."

"I feel better informed, less biased, just as firm in some convictions, and richer for having been here to share."

Summary

The data collected from administration of three assessment instruments and a personal commitment form were analyzed by computer using frequencies, correlations, and analyses of variance. The results indicate that the Sexism Awareness Workshop was effective in bringing about a statistically significant increase in degree of awareness of sex bias and sex stereotyping in vocational education.

CHAPTER 4

Summary and Recommendations

The major purpose of the study was to develop a model for increasing awareness of sex bias and sex stereotyping in vocational education. Homemaking teachers in the state of Texas were utilized as the target group for testing the model.

The need for the study was based upon Public Law 94-482 which mandated efforts to eliminate sex bias and sex stereotyping in vocational education in general and in consumer and homemaking education in particular. In addition, the study addressed the goal of the Texas State Board of Education to develop a statewide awareness of programs and activities to reduce sex bias and sex stereotyping.

Development and Pilot Testing of the Model

The model consisted of the development of workshop activities and assessment instruments which contained references and examples for a specified vocational program--in this instance, consumer and homemaking education. The activities for the workshop were adapted from existing materials or were developed for a defined purpose.

Five activities, an introduction, and conclusion made up the five-hour workshop. Three assessment instruments, Sexism Awareness Instrument (SAI), Current Behavior Practices Questionnaire (CBPQ), and Personal Commitment, were designed by the researchers to determine the degree of awareness of sex bias and sex stereotyping of the participants prior to the workshop and at its conclusion. In addition, the Bem Sex Role Inventory was used to obtain feminine, masculine, androgynous and

undifferentiated scores of the respondents.

The materials and assessment instruments were pilot tested with a group of homemaking educators (all female) and male vocational counselors. Revisions were made as a result of the evaluations of each segment of the workshop.

The next part of the model consisted of training peer facilitators to conduct workshops for all the homemaking teachers in the state. At the same time that the facilitators were being trained, research data were being collected to determine the effectiveness of the materials in increasing awareness of sex bias and sex stereotyping.

Collection and Analysis of Data

Persons participating in the facilitator training workshops were asked to complete assessment instruments prior to and following the five-hour workshop. The data were analyzed by various computer programs to obtain frequencies, t-ratios, correlations, and analyses of variance results. Ninety-five subjects completed the research segment of the workshop. Eight-one were female home economics educators and 14 were male vocational counselors.

Results

Examination of the analysis of the data revealed the following results:

1. There was a statistically significant difference at the .001 level between the pre-test and post-test scores on the Sexism Awareness Instrument. In addition, the same difference was true for both the identification responses and the explanation responses when they were examined separately.
2. A total of 259 personal commitments were made as a result of

the workshop. These commitments indicated the steps that the participants would take to eliminate sex bias and sex stereotyping from their attitudes and behaviors, particularly as these biases and stereotypes related to their teaching.

3. A correlation of the Sexism Awareness Instrument (SAI) adjusted gainscores with various categories of the demographic data which were collected and the other assessment instruments revealed three statistically significant correlations at the .005 or lower level. Two of the correlations, however, were negative. It was found that as percentages of males in the homemaking teachers classes increased and as exposure to sexism workshops increased, the gainscores on the SAI decreased. The one correlation which was positive indicated that as the adjusted gainscores on the SAI increased, the total number of personal commitments increased.

4. When scores on the Current Behavior Practices Questionnaire (CBPQ) were correlated with the other assessment instruments and the demographic data, it was found that as the non-sexist score on the CBPQ increased, the total number of personal commitments also increased. This result was statistically significant at the .04 level.

5. Analysis of variance revealed that there was a statistically significant difference at the .01 level or lower probability level in the scores of males and females on the SAI pre-test total, SAI post-test total, SAI adjusted gainscores, CBPQ, Commitment total, and Commitment total/CBPQ adjusted gainscores. On each instrument the females scored higher than the males.

6. Job position which the respondent held made a statistically significant difference at the .001 probability level on the SAI pre-test total, SAI post-test total, SAI adjusted gain-score, Commitment total, and Commitment Total/CBPQ Adjusted gainscores. Home Economics supervisors had the highest means and vocational counselors had the lowest on each of the various instruments.
7. A one-way analysis of variance between scores of homemaking teachers and vocational counselors on the Sexism Awareness Instrument revealed that the teachers consistently scored higher than the counselors. This difference was statistically significant at the .001 level on the pre- and post-test total scores, identification scores and explanation scores.

Other results were obtained which are interesting and could have an effect upon future workshops or in-service meetings.

1. Age of the participant, years experience as a public school educator, year degrees were received, size of school, or the score on the CBPQ had no statistically significant correlations with the SAI adjusted gainscores.
2. There were no significant correlations between the CBPQ and any of the demographic data.
3. None of the correlations of the Personal Commitment total with items on the demographic data sheet were statistically significant.
4. Teaching concentration and educational level as indicated by degrees received did not make a significant difference on the scores of the three researcher-developed instruments, SAI,

CBPQ, or Personal Commitment.

5. The total number of commitments made did not make a significant difference on the SAI adjusted gainscores.
6. There were no statistical differences in the number of commitments made when examined by age groupings of the respondents.
7. When individual items on the SAI were examined for consistency of the subjects responses, it was found that 20 percent got the pre-test wrong/post-test right, 27 percent got pre-test wrong/post-test wrong, 11 percent got pre-test right/post-test wrong, and 42 percent got pre-test right/post-test right.
8. The overall workshop evaluation revealed that: 1) over three-fourths of the participants felt that the length of the workshop was about right; 2) all of the persons either liked the content of the workshop very much or thought that it was okay; and 3) of the comments which indicated what the respondents liked most and liked least about the workshop, 78 percent were under the "Liked" category and 18 percent were under the "Disliked" category.

Recommendations

The following recommendations are made based upon the results of the current project:

1. In light of the favorable results obtained during this project, it is essential to extend to a larger number of participants (3000 homemaking teachers in the state) the opportunity to increase their awareness of sex bias and sex stereotyping. This procedure should assist in improving the quality of education provided for Texas vocational homemaking students. In

addition, it will help the state of Texas accomplish parts of Public Law 94-482 which specifically lists the need for states to "carry out programs...to overcome...sex stereotyping in vocational education programs (including programs of homemaking)...."

The objectives of a second project could be to utilize the workshop materials developed in this project on a state-wide basis. An inherent part of the project could be to determine the current sexist teacher behavior practices, the steps teachers plan to take toward eliminating sexism, and the changes in the degree of awareness of sex bias and sex stereotyping on the part of the Texas vocational homemaking teachers.

2. The workshop materials and the assessment instruments can serve as a model program for creating awareness of sex bias and sex stereotyping in other vocational areas in Texas, such as Agricultural Education, Distributive Education, Health Education, Interdisciplinary Education, Business and Office Education, Post-Secondary Education, Trade and Industrial Education, and related programs. The materials can easily be adapted for the other vocational programs.
3. The materials can provide directions and strategies for the inclusion of sex bias and sex stereotyping information in the teacher training institutions of the state.

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APPENDICES

INFORMATION SHEET

Sex:

Male _____

Female _____

Position:

Homemaking Teacher _____

Counselor _____

Teacher Educator _____

Supervisor _____

Other _____

Years Degree/s Received:

Bachelors 19_____

Masters 19_____

Doctorate 19_____

Classification of School:

B _____ AAA _____

A _____ AAAA _____

AA _____

Age Group:

21-25 _____

26-30 _____

31-40 _____

41-50 _____

over 50 _____

Number of Years as a Public School Educator:

1-3 _____ 11-15 _____

4-6 _____ 16-20 _____

7-10_____ over 20 _____

Exposure to Sexism Workshops (other than today):

None _____ 1 day _____

1-2 hrs. _____ more than 1 day _____

half day _____

Do you actively seek information on sexism? Yes _____ No _____

For Homemaking Teachers Only

Teaching Concentration:

Useful _____

Gainful _____

Combination _____

Total Enrollment of Your Classes Last Year: _____

Percentage of Males in Your Classes:

Less than 25% _____ 51-75% _____

26-50% _____ over 75% _____

SEXISM AWARENESS INSTRUMENT

PRE-ASSESSMENT

The Place: Any school, anywhere, USA

The Time: Monday, 8:00 a.m.

Your Assignment: ITEMIZE EVIDENCE OF SEXISM

You are a sexism detective with the assigned task of detecting sex bias and sex stereotyping in vocational education. This is your first job and you want to do it well. You have cleverly disguised yourself as a potted palm in order to observe Jane Jones' Homemaking I class. Read the following narrative. Underline each evidence of sexism, number it, and put a corresponding number in the right margin. Beside the number in the margin, briefly tell why the item is considered to be sexist.

It is to your benefit to list many small items rather than lumping several into one global description because your promotion depends upon minute details. Since this is real life, there are no instant replays. You must be alert to catch sexism the first time you notice it because you cannot go back. To help your keen detective mind, jot down in the right margin each evidence of sexism as you see it so you will be sure to mention everything to your boss, the district attorney. If you do a thorough job you may get put on the regular staff. Are you ready? Quick, behind the palm!

Jane Jones is hurrying to get ready for her first class. It is a Homemaking I class composed of both girls and boys. They are beginning a unit on foods and nutrition today. Jane is putting the finishing touches to the new bulletin board. One side is the result of concerns she has for overweight girls. To catch their attention, she has a drawing of a girl squeezing her waist with a tape measure and the caption, "Get into Shape for that Special Guy." The other side of the board has pictures of boys who are participating in athletics. The caption says, "Get into Shape for a Healthier Life." As Jane checks over the bulletin board, she thinks about how hard she has worked to get both boys and girls into homemaking. She believes that homemaking is important for boys because they can use the skills and knowledge when they are single or when their wives are out of town.

As Jane finishes, the students who occasionally type for her come in for some work. She gives them drafts of letters to the American Red Cross and the March of Dimes asking for free materials. She reminds the students to center the date, put a colon after the Dear Sir, and indent each paragraph five spaces.

The bell rings for first period to begin. As the students begin to file into the room, Jane sees

Steve and Trisha come in holding hands. They are planning to get married as soon as school is out. They will make a fine man and wife. Steve has been hesitant in deciding upon what he wanted to be in life. But the following paragraph from Olson's text they had studied in industrial arts class last quarter convinced him: "We don't believe nowadays that a person is born into a job, that his occupation is determined at or by his birth. We don't believe, either, that he must necessarily follow in his father's footsteps. We know that a person can succeed in several different occupations." Steve has decided not to be a teacher like his dad, but to be a carpenter.

Trisha also had inner conflict about what she wanted to do in life. Her ambition had always been to be a wife and mother. The following idea from their textbook helped Steve to convince Trisha to work so that he could get a firm hold on his career: "Today many women combine marriage with work outside the home. The need for extra income sends women into the labor force. Nevertheless, it remains true, and probably always will, that the aim of most girls is to successfully assume their roles as wives and mothers." So, Trisha agreed to work until she got pregnant, and then she would become a full-time mother.

Steve and Trisha separate as Trisha finds her assigned seat at the back of the room. Steve comes to the front table to sit with the other boys. Jane smiles to herself. She is so glad that she put all the boys at the front of the room because boys are much louder and less likely to pay attention than girls. She has had to watch them more closely.

The tardy bell rings. After checking the roll, Jane makes a few announcements. She tells the girls that the neighborhood nursery school needs a child care worker after school. Also, she mentions to the boys that the grocery store where she buys groceries for the school needs a bag boy.

Next, she asks for names of businessmen and/or their wives who might serve on the homemaking advisory committee. The class mentions Mr. Sam Smith, a local groceryman; Ms. Nancy Lord, a lady lawyer; and Mrs. Charles Williams, an attractive mother of one of the students.

This week the students will sign up for classes for next quarter. Jane encourages all of the students to continue with homemaking. She explains to the boys that they will not have to make a garment in the clothing unit unless they want to do so. They can study about retailing because some of them may want to own a clothing store one day.

With the announcements over, Jane begins the

lesson. She shows a transparency picturing a fish on a spear cooking in a fire and a fish in a frying pan as an introduction to the foods and nutrition unit. The caption reads, "Out of the fire into the frying pan," and Jane explains that early man cooked his food on the open fire. Through the improvements in knowledge and technology, many advancements have been made. Today a variety of methods are available from which to choose. This has led to development of the food service industry. Sanitation is an important aspect of this industry. Jane has selected this topic as the first unit of study. She shows her class a filmstrip to teach them the correct procedure for stacking and washing dishes. Then, for practice on sanitation, the students go to their kitchen units to wash dishes.

Jane notices her newly arrived edition of Forecast and takes a few minutes to flip through it. Her attention is attracted by an advertisement which describes an updated resource entitled What Everyone Should Know About Men's Fashions. "This knowledge and awareness are valuable for both the girls and the boys in your classroom. Most of the girls will soon be married and faced with the responsibility of advising, as well as buying and caring for their husband's clothing. Here's solid

professional advice on choosing and caring for a man's fashion wardrobe." This will be perfect for the clothing unit Jane will be teaching next quarter.

As she is clipping the ad, several loud pops draw her attention to the back kitchen. She looks up to see Meg and Mike engaged in a swatting context with their dishtowels. Jane hurries to the rescue telling Mike to stop. She is afraid he might hurt Meg. She goes on to tell Mike that if he can't behave, he'll have to leave the class because he distracts others who are interested in being good students.

Just before the bell rings, Jane makes one final announcement. She reminds the students of the FHA fund-raising project set for Friday. She asks the girls for volunteers to bake cookies and reminds the boys that she will need three volunteers to set up the booths. Students have really been active in FHA this year. A couple of boys are even running for office for next year.

As the dismissal bell rings, Jane gives a contented sigh. She is so glad she chose teaching homemaking as her profession. It is such a challenge to mold young students into worthwhile family members. She does decide, however, that she's been working too hard when she notices the potted palm moving out the door and down the hall.

POST-ASSESSMENT

You did such a fine job as sexism detective that you have been promoted to assistant district attorney. Your new assignment is to convince the judge that Jane Jones is guilty of perpetuating sex bias and sex stereotyping. You breathe a sigh of relief as the D.A. informs you that the potted palm was wired with a mini-camera and the whole incident has been videotaped. But--the tape self-destructs as it plays. You must be quick to point out the evidence of sexism the first time through.

Again, you need to underline each evidence of sexism, number it, and put a corresponding number in the right margin. Beside the number in the margin briefly tell why the item is considered to be sexist. Be alert! Courtroom talk has it that the judge is particularly hard to convince and that many minor offenses are more convincing than one major offense. Be sure to note each specific evidence as it occurs. Who knows, you may be the new D.A.!

(The Post-test is the same as the Pre-test. See pages 51-55).

CURRENT BEHAVIOR PRACTICES QUESTIONNAIRE

Directions: Read each question. Check your response--ALWAYS; OFTEN; RARELY; or NEVER--in the appropriate column, indicating how often you engage in the practice.

	ALWAYS	OFTEN	RARELY	NEVER
1.	When you talk about careers with your students, do you tend to give traditional examples such as interior designer for females and architect for males?			
2.	Would you make the following statement: "We need to send invitations for the club dinner to the local businessmen and their wives?"			
3.	Do you expose your students to the idea that when both marriage partners are wage earners, they should share equally in home and family responsibilities?			
4.	If your class was composed of both males and females and they were involved in a classroom activity in small groups around the room, would you ask the males to move the chairs back to their original positions and the females to collect and staple the papers?			
5.	If a female came to you to discuss career possibilities in education, would you encourage her to consider administration as one of her options?			
6.	If you were writing a letter to a business inquiring about resources for your class and you did not know to whom you should address the letter, would you write "Dear Sirs"?			
7.	Do you encourage females to be more concerned with their appearance than males?			
8.	If your class was composed of males and females and you needed books from the bookroom, would you ask for male volunteers?			

ALWAYS	OFTEN	RARELY	NEVER	
				9. Would you be equally concerned about a female senior student in your class who was unsure about her career choice as you would a male senior student who was unsure?
				10. If a student made the following statement, would you ask the student to examine it? "For the Parents Appreciation Night mothers could leave their younger children with a group of students in one of the classrooms set up as a nursery."
				11. If a wad of paper flew across the classroom, would you assume that a male student threw it?
				12. If your FHA/HERO group was composed of both males and females, would you make the following suggestion for fund-raising activities: "The females can have a bake sale and the males can mow lawns."
				13. If a male student wanted information about careers in medicine, would you include nursing as one of his options?
				14. When talking to a female about using loud language, would you say, "Ladies don't talk that way."?
				15. If one of your classes was 3/4 male and another class was 1/4 male, would you expect the class with more males to be the louder of the two?
				16. If your class was composed of males and females and you were assigning duties for a classroom clean-up and organizational day, would you select a male to develop and put up a bulletin board?
				17. Would you justify males taking clothing courses by saying they would need these skills before they married or when their wives were not home?
				18. Asked your opinion about the hiring of a man or a woman for the assistant principal opening, would you reply, "I think they should hire the most qualified person regardless of his sex."

ALWAYS	OFTEN	RARELY	NEVER

19. If in a clothing class there were both males and females, would you expect the females to initially be able to sew better than the males?

20. If your class was composed of males and females and the film projector was not working when you were trying to show a film to your class, would you ask one of the males to see if he could fix it?

PERSONAL COMMITMENT SHEET

I LOOK FORWARD TO TRYING THESE THINGS AS A STEP TOWARD ELIMINATING SEXISM:

I SHALL START THE FIRST WEEK WITH:

WHAT DO YOU THINK?

Please rate and comment on the following items:

Length of Workshop	Too short		About Right	Too long	
	1	2	3	4	5
Content of Workshop	Liked very much		OK	Disliked	
	1	2	3	4	5

What did you like most about this workshop?

What did you like least about this workshop?

Additional Comments and Suggestions: